

Buying Clinic

Whether you're looking for new kit or want to improve your existing hardware, you'll always find the very best advice at the Buying Clinic – where you never spend more than you have to

CONTACT

BUYING CLINIC

If you need buying advice on hardware and software, write to:

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DESKTOP PC COMPONENT SPECIFICATIONS

WHAT DO I NEED IN A TOP-END PC?

Q I've been reading your magazine for about six months and I'm about to buy a new PC. I have a budget of between £1,500 and £2,500 and I want a top-end PC that's as future proof as possible, mostly for playing games. As far as I can see, I've got a choice between dual-core or an AMD FX55 for the processor. Which is the best? Also, which graphics cards should I use?

Andy Caley

A You won't have any problems finding a PC with that budget, but choose your core components carefully. Dual-core processors might be the current new technology but they don't necessarily offer double the performance of a normal processor.

Dual-core processors need games to be written specially for them. Most current applications and games aren't written in this way and will only use a single core. In the case of Intel's 840 processor,

which uses two 3.2GHz Pentium 4 cores, it means that when you play games you'd only get the performance of a 3.2GHz Pentium 4.

Considering the high cost of dual-core processors we'd recommend opting for a single-core FX processor instead. You can always upgrade the processor at a later date when more software is written with dual-core processors in mind.

As you want to play games, the type of graphics card you choose is very important. For your price range it might look tempting to buy two nVidia 6800 Ultra cards and use scalable link interface (SLI) technology to run them together. However, the new GeForce 7800 GTX has similar performance from a single card at almost half the price. You can also use SLI to run this card with another 7800 and get even more performance, but two cards will cost around £800 including VAT.

Finally, you need to choose your monitor carefully. As you'll have a system that's capable of playing games at a resolution of 1,600x1,200, you'll



► nVidia's GeForce 7800 GTX is the fastest graphics card you can buy



need at least a 20" LCD, as 19" and below support maximum resolutions of only 1,280x1,024. Try to get one with a 16ms or lower response time or fast-moving games will cause motion blur onscreen.

Alienware specialises in this high-end market, so it's worth paying its site a visit at www.alienware.co.uk.

VIDEO CAPTURE ANALOGUE AND DIGITAL

HOW DO I TRANSFER VIDEO TO MY PC?

Q I have a camcorder and I would like to get the footage transferred to a computer. What is the cheapest way to do so? I use Windows XP and I have a budget of around £70.

Oliver Beatson



▲ A TV tuner will let you capture video from your analogue camcorder

A Transferring footage will depend on whether you have a digital or analogue camcorder. If you have a digital camcorder then it will have a FireWire port on it. This can be connected directly to your PC and Windows XP will automatically detect and recognise that a camcorder is connected. If you don't have a FireWire port on your PC, buy a PCI FireWire card for £22 from www.expansys.com.

If you have an analogue camera, you'll need to buy a video capture card instead. Our video-editing hardware Labs test in *Shopper* May 2005 covers the kind of equipment you'll need. If you have USB2.0 ports, Hauppauge's WinTV-PVR-USB2 is easy to install and lets you watch TV on your PC as well. It's available for £62 including VAT from www.dabs.com.

FILE TRANSFER USB

IS USB THE KEY?

Q I want to be able to transfer files from home to work and I was wondering about the best way to do this. I have been thinking of buying a USB key, but can you think of any other way?

Joseph Mellor



▲ USB keys are a simple way of transferring files

A It depends on how many files you want to transfer. Expansys sells 1GB USB keys for £52 inc VAT, which should be enough storage for most people, plus they're easy to transport.

If you want to carry more data, LaCie's 60GB Mobile Hard Disk (£150 including VAT from www.dabs.com) is an excellent product. It uses a notebook hard disk, so it will fit in your bag easily.

Finally, if it's only for an occasional file, why not sign up for a Gmail account at www.gmail.com? This gives you 2GB of storage and if you use Gmail Drive (www.viksoe.dk/code/gmail.htm) you can access your account as if it were a normal Windows drive from home and work, although you're limited to files of 10MB in size.

See page 207 for an alternative to Gmail Drive called RoamDrive.



DISPLAY BUYING ADVICE

DO I NEED SEPARATE MONITORS?

Q I want to buy an LCD TV to replace my five-year-old TV and my very old CRT monitor. I've seen Acer's AT3201W 32" TV for £799 at www.dabs.com. This seems like very good value, but will it perform as well as a gaming monitor? Should I have a separate monitor for the PC? Also, what kind of inputs will I want?

Graham Jones



▲ Acer's AT3201W 32" TV is very good value and ideal for PC use

There are some things you need to consider before making a purchase. First, high-definition (HD) video will be delivered by a digital connection when services are released later this year. These services will use a new connector called HDMI. This can be converted into DVI, but it means you can't have an HD set-top box and your PC connected to the monitor at the same time.

You can buy DVI switcher boxes for around £150; alternatively, you can look for an LCD with more digital inputs and, in particular, an HDMI connector.

Also, you can't use the PC if you want to watch TV, which could be a drawback if you want to browse the web while you have the TV on. If that's going to be a problem, you will be better off with a dedicated monitor for the PC and a separate TV.

A The AT3201W is perfect for PC use as it has both digital and analogue PC inputs. We'd recommend using the digital input, as this will give you the best picture quality. Its 12ms response time is good for such a large panel.



WIN

PC Hardware Annoyances

If you send our star letter, you'll receive a prize. This month's winner gets a copy of O'Reilly's *PC Hardware Annoyances*, which will help you fix any hardware problems your PC is experiencing. If you don't want to spend the rest of your life troubleshooting, keep this book next to your PC along with the latest copy of *Computer Shopper*. You will find that all your PC woes disappear.

STORAGE DVD WRITER

DUAL- OR DOUBLE-LAYER: WHAT'S THE DIFFERENCE?

Q I want to buy a DVD writer but I have heard that there are new ones coming out that support dual-layer DVD-R discs for a total capacity of 8.5GB. However, there are already double-layer DVD+R discs available along with the drives that write them. What's the difference and which one should I go for?

Steve Mullens

A The DVD market is one of the most annoying and difficult to understand. Essentially, two different main families of standards were created: DVD-R and DVD+R.

The industry bodies behind each one like to wax lyrical about why their particular standard is better than the other. In reality, however, the differences are really small and don't even apply to most people.

In our opinion, as 8.5GB discs are very expensive for both formats there's little financial incentive to use them. If you're going to create home movies then the hours of footage that



▲ NEC's ND-3540A supports all the formats you're likely to want to use

standard DVD+/-R discs provide is fine for most people.

With that in mind, we don't see either two-layer format as very important until the prices of media come down.

To keep your options open, go for a DVD writer that supports both DVD-R DL and DVD+R DL.

We review one such writer, the NEC ND-3540A, on page 44.

HARD DISK RAID

WHAT IS RAID AND HOW WILL IT HELP ME?

Q My PC supports something called RAID, which I've been told can improve performance and also keep my data safer. This sounds good to me, but what do I need to buy to use it?

Dennis Howell

A A Redundant Array of Inexpensive Disks (RAID) is a way of using multiple hard disks in combination with each other. There are different levels of RAID available depending on the number of disks you want to use; some offer better performance and others offer better protection for your data. Most PCs support RAID 0 or 1, both of which require, as a minimum, two identical hard disks to work.

RAID 0 is also known as striping. It works by splitting the data into blocks and writing alternate blocks to each disk. The effect is that you enjoy much better performance as both hard disks are

working together. You also get the capacity of both disks: if you buy two 250GB disks, for example, in effect you have a 500GB disk. However, if one drive fails you lose all your data, as each file will lose half its information.

RAID 1 is also known as mirroring. In this scenario you only have the capacity of one hard disk, but all your data is automatically saved to both disks. If one disk fails, you still have a complete backup of all your data. RAID 1 is therefore a good way to protect important files. However, you won't see a performance boost.

If you want to go down the RAID route, you need to work out how important the data is that you're going to store. If you make regular backups then RAID 0 is a simple way to improve performance and increase capacity. If, on the other hand, you have a lot of digital music and photo



▲ Using multiple hard disks in a RAID array can improve performance and help protect your data

files, RAID 1 gives you peace of mind that your data will remain safe.

Currently we recommend Samsung's SpinPoint SP2504C 250GB SATAII drive (£96 including VAT from www.komplett.co.uk) or Hitachi's Deskstar T7K250 160GB Parallel ATA drive (£61 including VAT from www.komplett.co.uk). ☐